

1. A liquid ejection recording head for effecting recording by ejecting first liquid and second liquid which is a different kind of liquid through different ejection outlets, while bi-directionally scanning a recording material in a scanning direction, comprising:

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wherein said first ejection outlet array



outlet array group and said second ejection outlet  
array group are arranged such that kinds of the liquid  
are symmetrical with respect to said first and third  
ejection outlet arrays.

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6. An apparatus according to Claim 1, further  
comprising a fifth ejection outlet array, in addition  
to said first and second ejection outlet array, for  
ejecting liquid which is a kind of liquid different  
10 from the liquid ejected through said first and second  
ejection outlets.

7. An apparatus according to Claim 6, wherein  
the liquid ejected from said fifth ejection outlet  
15 array is black ink.

8. An apparatus according to Claim 1, wherein  
said first ejection outlet array group and said second  
ejection outlet array are provided in one orifice  
20 plate.

9. An apparatus according to Claim 1, further  
comprising a plurality of energy conversion element  
array groups for ejecting the liquid through said  
25 first ejection outlet array group and a plurality of  
energy conversion element array groups for ejecting  
the liquid from said second ejection outlet array

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15. A liquid ejection apparatus comprising a

carriage for carrying said liquid ejection recording head as defined in Claim 1.

16. A liquid ejection recording head for  
5 effecting recording by ejecting first liquid and  
second liquid which is a different kind of liquid  
through different ejection outlets, while bi-  
directionally scanning a recording material in a  
scanning direction, comprising:

10 an orifice plate provided with a plurality of  
ejection outlet arrays each having a plurality of  
ejection outlets arranged at a predetermined intervals  
in a direction different from the scanning direction;

an element substrate having energy conversion  
15 elements, disposed corresponding to the ejection  
outlets of said orifice plate, for ejecting liquid,  
liquid supply paths for supplying the liquid to said  
ejection outlet arrays of said orifice plate, and a  
driving circuit for driving said energy conversion  
20 elements; and

wherein said ejection outlet arrays include a  
first ejection outlet array for ejecting second  
liquid, a second ejection outlet array for ejecting  
first liquid, a third ejection outlet array  
25 for ejecting the first liquid and a fourth ejection  
outlet array for ejecting the second liquid arranged  
in the order named in the scanning direction, and

5           17. An apparatus according to Claim 16, wherein  
said energy conversion elements are electrothermal  
transducer elements for generating thermal energy  
for ejecting liquid from said ejection outlet.

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